



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,099	12/28/2000	Patrick L. Connor	10559-365001 /P10171	8244

20985 7590 01/14/2004

FISH & RICHARDSON, PC
12390 EL CAMINO REAL
SAN DIEGO, CA 92130-2081

EXAMINER

HUYNH, KIM T

ART UNIT	PAPER NUMBER
----------	--------------

2112

DATE MAILED: 01/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/752,099

Applicant(s)

CONNOR ET AL.

Examiner

Kim T. Huynh

Art Unit

2112

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo et al. (US Patent 6,047,001) in view of Onagawa (US Patent 6,567,882)

As per claims 1, 10, 26, Kuo discloses a method comprising:

- receiving status information concerning a size and location of a data packet; (col.7, lines 37-65)
- storing the status information and the statistical information on a storage device using a single write procedure. (col.2, lines 13-22), (col.2, lines 37-40)

Kuo discloses all the limitations as above except receiving statistical information concerning a bus condition. However, Onagawa discloses the state machine monitors PCI bus transactions over the PCI bus and generates PCI status information showing the phase in the course of transaction. (col.6, line 63-col.7, line 7)

It would have been obvious to one having ordinary skills in the art at the time the invention was made to incorporate Onagawa's teaching into Kuo's method so as to provide a technique for extending the PCI

functions based on the information of an extended PCI configuration area.

(col.1, lines 47-53)

As per claim 2, Kuo discloses the method further comprising receiving the data packets from the data bus. (col.8, lines 1-10)

As per claim 3, Kuo discloses the method further comprising monitoring the status of the bus and generating the statistical information. (col.7, lines 37-67), (col.8, lines 1-10), (also see abstract)

As per claim 4, Kuo discloses the method further comprising generating control information which specifies the storage location for each data packet. (col.7, lines 37-67), (col.8, lines 1-10)

As per claim 5, Kuo discloses the method further comprising storing the control information on the storage device. (col.7, lines 60-67), (col.8, lines 1-10)

As per claim 7, Kuo discloses the method further comprising retrieving the data packets stored on the storage device. (col.7, lines 37-65)

As per claim 8, Kuo discloses the method further comprising retrieving the status information stored on the storage device. (col.8, lines 11-28)

As per claim 9, Kuo discloses the method further comprising monitoring the data packets, generating the status information about the data packets, and providing the status information to the method. (col.8, lines 40-54), (also see abstract)

As per claim 11, Kuo discloses an Input/Output (I/O) controller connected to a data bus; wherein said I/O controller receives from said data bus packets and

said I/O controller monitors the status of said bus and generates said statistical information. (col.8, lines 1-10, 40-54)

As per claim 12, Kuo discloses a control information write process for receiving control information which specifies a storage location where each said data packet is to be stored and storing said control information on said storage device. (col.7, lines 37-65)

As per claim 13, Kuo discloses a device driver process for generating said control information and providing it to said control information write process. (col.7, lines 37-65)

As per claims 6, 14, Kuo discloses the method further comprising storing each data packet on the storage device at the storage location specified by the control information. (col.7, lines 37-65), (col.8, lines 40-54)

As per claims 15, 18, 20 Kuo discloses the reporting process further comprising:

- a first/second communication bus for interfacing said device driver process and said statistics reporting process; (col.7, lines 66-67), (col.8, lines 1-10)
- wherein said device driver process provides said control information to said control information write process via said first/second communication bus. (col.7, lines 37-65)

As per claim 16, Kuo discloses device driver process includes a packet retrieval process for retrieving said data packets stored on said storage device via said first communication bus. (col.7, lines 37-65)

Art Unit: 2112

As per claims 17, 19, Kuo discloses device driver process includes a status retrieval process for retrieving said status information stored on said storage device via said first/second communication bus. (col.7, lines 37-65)

As per claim 21, Kuo discloses wherein said I/O controller includes a status transmission process for monitoring said data packets, generating said status information concerning the size and condition of said data packets, and providing said status information to said status information process via said second communication bus. (col.7, lines 37-65), (col.8, lines 1-10)

As per claim 22, Kuo discloses the storage device is a system memory. (col.5, lines 31-45)

As per claims 23, 27, Kuo discloses wherein said system memory includes a ROM and said statistics reporting process resides on said ROM. (col.7, lines 37-65)

As per claim 24, Kuo discloses wherein storage device includes a dedicated memory area for storing said statistical information, said control information, and said status information. (col.7, lines 37-65)

As per claim 25, Kuo discloses dedicated memory area includes:

- a control information storage area for contiguously storing said control information, and (col.7, lines 37-65)
- a status/statistical information storage area for contiguously storing said status information and said statistical information; (col.7, lines 37-65)

Art Unit: 2112

- wherein said unified write process stores said status information and said statistical information using a single write procedure.(col.2, lines 13-40)

As per claim 28, Kuo discloses a statistics reporting system comprising:

- an Input/Output (I/O) controller connected to a distributed computing network; wherein said I/O controller receives data packets from said network, monitors the status of said network and generates statistical information concerning said network's condition; (col.8, lines 1-10, 40-54)
- a status information process for receiving status information concerning a data packet; (col.7, lines 37-65)
- a statistics information process for receiving said statistical information; and (col.7, lines 37-65)
- a unified write process for storing said status information and said statistical information on a storage device using a single write procedure; and(col.2, lines 13-22), (col.2, lines 37-40), (col.7, lines 37-65)
- a central processing unit (CPU) for executing said statistics reporting process which resides on a ROM. (col.7, lines 66-67), (col.8, lines 1-10)

As per claim 29, Kuo discloses a control information write process for receiving control information which specifies a storage location where each said data packet is to be stored and storing said control information on said storage device. (col.7, lines 37-65)

As per claim 30, Kuo discloses the statistics reporting system further comprising:

- a first communication bus for interfacing said device driver process and said statistics reporting process; and (col.7, lines 66-67), (col.8, lines 1-10)
- a second communication bus for interfacing said I/O controller and said statistics reporting process. (col.7, lines 66-67), (col.8, lines 1-10)

Response to Arguments

3. Applicant's arguments filed on 8/21/03 have been fully considered but are moot in view of the new ground(s) of rejection.

In response to applicant's argument that Kuo does not disclose statistical information concerning a bus condition. Wherein Onagawa discloses the state machine monitors PCI bus transactions over the PCI bus and generates PCI status information showing the phase in the course of transaction. (col.6, line 63-col.7, line 7). Thus, the prior art teaches the invention as claimed and so they are moot in view of the new ground(s) of rejection.

Conclusion

4. *Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim Huynh whose telephone number is (703)305-5384 or via e-mail addressed to [kim.huynh3@uspto.gov]. The examiner can normally be reached on M-F 8:30AM- 6:30PM.*

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (703) 305-4815 or via e-mail addressed to [mark.rinehart@uspto.gov]. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9306 for regular communications and After Final communications.

Art Unit: 2112

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-5631.



Kim Huynh

Dec. 22, 2003

Khanh Dang
Primary Examiner